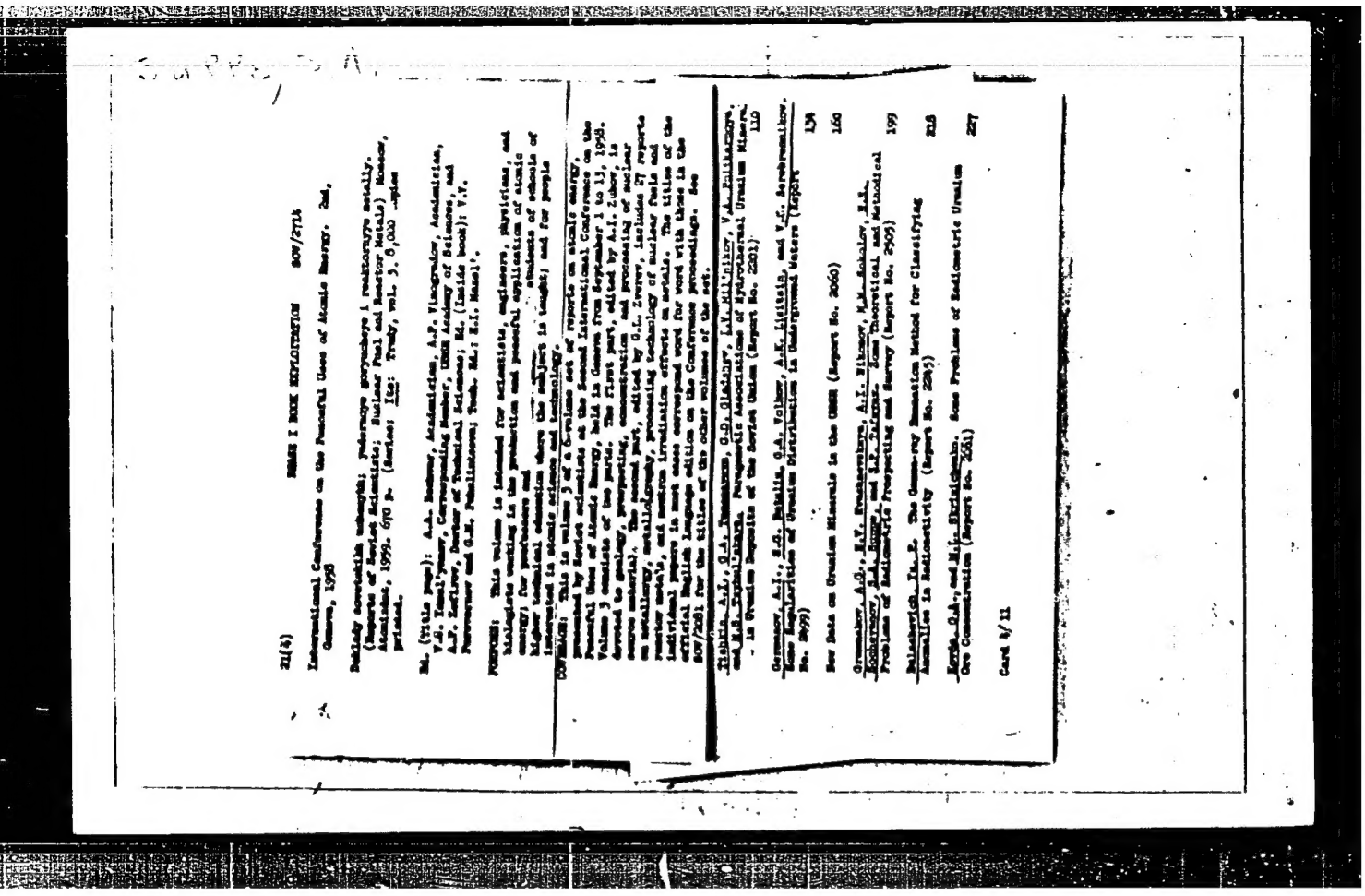

WAKSMUNDZKI, A.; SOCZEWINSKI, E.; SUPPRYNOWICZ, Z.

On the relation between the composition of the mixed stationary phase and the retention time in gas-liquid partition chromatography. Coll Cz Chem 27 no.8:2001-2006 Ag '62.

1. Department of Physical Chemistry, University Lublin, Poland.

SUPRANOVICH, F., inzh.

Head for the annular cut-out of large diameters and thicknesses.
Mash.Bel. no.6:205-206 '59. (MIRA 13:6)
(Drilling and boring machinery--Attachments)

SUPRANOVICH, T. I.

USSR/Physics of the Hydrosphere - Dynamics of Sea and Land Water, N-2

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 36252

Author: Supranovich, T. I.

Institution: None

Title: Calculation of the Maximum Tide-Ebb Flows

Original Periodical: Tr. Gos. okeanogr. in-ta, 1955, No 30, 221-225

Abstract: A method is proposed for calculating the maximum tide-ebb flow using equations proposed by N. P. Vladimirskiy for the highest and lowest levels that are possible, depending on the astronomical causes. The initial data for such a calculation are taken to be the values of the harmonic constants of the maximum amplitude of the flow component. The characteristics of the maximum tide-ebb flow are calculated beforehand for the data obtained as a result of the computations. The secular and seasonal variations of the maximum tide-ebb flow are considered. A simplified computation method for the changes in the flow is proposed, based on

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Card 2/2

AUTHOR: Supranovich, T. I. 30-12-8/19

TITLE: The Graphic Operation of the Computation of the Harmonic Constants From Two Series of Observation Lasting 24 Hours (Graficheskiy priyem vychisleniya garmonicheskikh postoyannykh iz dvukh sutochnykh seriy nablyudeniy).

PERIODICAL: Meteorologiya i Gidrologiya, 1957, Nr 12, pp. 32 - 35 (USSR)

ABSTRACT: The work concerns the investigation of the tide. For the purpose of solution of a whole series of tasks connected with investigations of the tide, the methods of treatment of one and two series of observation lasting 24 hours are used. The determination of the harmonic constant of a wave, finally, comes to the computation of amplitude of oscillation Z, Y, and of the phases z, y (table 1, pp. 34-35).
For each wave found out, the quantities Z, z are determined by astronomical and physical-geographical relations (conditions). The influence of the latter ones is expressed by the harmonic constants. The quantities Y, y only depend on the astronomical data.
The astronomical arguments: B, b; C, c; and the components of the 12- and 24 hours values of the flow: F_2, f_2; F_1, f_1 serve as starting point for the computations of the data. The values

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of astronomical arguments are taken from the tables: The corrections of the amplitude of oscillation B and of the phase according to the observation data, the corrections of the amplitude of oscillation C - each according to the moon parallax and the corrections of the phase c - each according to moments of culmination of the moon.

The amplitude of oscillation (F_2, F_1) and the phase (f_2, f_1) of the summary components of the flow easily can be determined by means of the mold proposed by A. I. Duvanin; For this purpose it is sufficient to overlie the curve of the flow lasting 12 - or 24 hours on the mold with the course of the flow lasting 12- or 24 hours according to the real observations. The phase difference of these two curves represents the initial phase of the flow, the amplitude of oscillation, however, is computed as average between the maximum and minimum values of the flow. Furthermore the difference and relations of the initial data, which are denoted in table 1 (pp. 34-35) by xX(or x^1, X^1), are to be determined. As result of the variation of the initial data one of the two main waves lasting 12- (or 24 -) hours will have the same characteristics, as well in the first 24 hours of observation, as in the second ones. One of the fluctuations then easily can be

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On the Operation of the Computation of the Harmonic Constants from Two Series of Observation Lasting 2 Hours.

analogously, if the flow elements of the second 24 hours are subtracted from the flow elements of the first 24 hours, i. e. the differences are determined.

$$\left.\begin{aligned} Y\cos y &= X_1\cos x_1 - X_2\cos x_2 \\ Y\sin y &= X_1\sin x_1 - X_2\sin x_2 \end{aligned}\right\} \quad (1)$$

$$\left.\begin{aligned} Z\cos z &= X'_1\cos x'_1 - X'_2\cos x'_2 \\ Z\sin z &= X'_1\sin x'_1 - X'_2\sin x'_2 \end{aligned}\right\} \quad (2)$$

If the differences (1) and (2) are known, the characteristics Y, y (or Z, z) may be computed according to the following formulae:

$$\left.\begin{aligned} \operatorname{tg} y &= -\frac{Y\sin y}{Y\cos y} = \frac{X_1\sin x_1 - X_2\sin x_2}{X_1\cos x_1 - X_2\cos x_2} \end{aligned}\right\} \quad (3)$$

$$Y = \sqrt{(Y\sin y)^2 + (Y\cos y)^2} = \sqrt{(X_1\sin x_1 - X_2\sin x_2)^2 + (X_1\cos x_1 - X_2\cos x_2)^2} \quad (4)$$

There are 1 table and 2 Slavic references.

1. Oceanography 2. Water waves-Harmonics 3. Astronomy-Effects

3(9)
AUTHOR: Supranovich, T. I. SOV/50-59-7-9/20

TITLE: From the Experience in the Analysis of Short-termed Observations of Tide Phenomena (Iz opyta analiza kratkosrochnykh nablyudeniy nad prilivnymi yavleniyami)

PERIODICAL: Meteorologiya i gidrologiya, 1959, Nr 7, pp 36-37 (USSR)

ABSTRACT: The practice of joint evaluation of some daily observations of tides shows that a harmonic analysis offers the most reliable results for those tide waves which are biggest in size. To determine the harmonic constants by this method, at least 3-4 series of daily measurements are carried out in each point. The observations at different times are carried out under different astronomic conditions. Therefore, a group of such observations may also contain some with small amplitudes. As a rule, the harmonic amplitudes corresponding to the latter are unreliable, especially with not large components. In analyzing the curves distorted by observation errors, these components can be separated much worse than the other components. For these reasons, one of the two principal half-day (or day) waves shows nearly equal dimensions, while the dimensions of the

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other, not so distinctly marked, wave must be determined more precisely, or cannot be averaged at all due to a considerable divergence.- A method is pointed out here which was applied to such cases and has always improved the result. The "helmsman" method of the tide analysis expresses the half-day (or day) variations in form of two summands, formula (1). The tide variations caused by a principal wave (here S_2) or by a component related to it can be expressed by formula (2). It is assumed that in evaluating the observations the results for this wave are heterogeneous. Then, the variations caused by this wave can be separated from each day series, and the harmonic constants can be determined by the most reliable variations. Formula (6) is derived for the required harmonic constants. The amplitudes and phases of the other components (both of the wave height and of the currents) are computed in a similar way. 4 solutions for the waves of the half-day period, and 2 solutions for the waves of the day-period, are obtained for each series of observations. The ordinates and points of time necessary for the computation are taken from the wave-course diagram. The practice shows that usually those

observations where the required wave is not distinctly marked show a spread in the values of the harmonic constants. The results of the analysis of reliable curves are nearly equal and permit the mean values of the constants to be obtained. Finally, the computation of the amplitudes and phases of a wave is explained by an example. There are 1 figure and 1 table.

SOSINA, S.M.; PASHKOVSKAYA, M.T.; Prinimali uchastiye: SUPRANOVICH, V.A., mladshiy nauch. sotrudnik; NOVIK, V.G., mladshiy nauch. sotrudnik; TSYGANKOVA, R.I., tekhnik-tekhnolog

Methods for the disinfection of molasses for the production of baker's yeast. Trudy BNIIPPT no.4:113-126 '61. (MIRA 17:10)

L [illegible] EWA(b)-2/EWA(j)/EWT(1) Pa-4 RML/JK

ACCESSION NR: AP5008022 S/0016/65/000/003/0143/0143

AUTHOR: Frolova, N. I.; Vayntraub, E. A.; Voronina, T. P.; [illegible]; Spasskaya, Z. N.; Supranyuk, A. K. 30 29 B

TITLE: Characteristics of salmonella isolated in the Kuibyshev rayon of Moscow during 1961-1963

SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 3, 1965, 143

TOPIC TAGS: epidemiology, Moscow, salmonella, bacteriologic culture, method, serologic test, gastroenteritis, food poisoning, antibiotic, levomycetin, streptomycin, biomycin

ABSTRACT: The results of a microbiological study and serologic identification of 186 strains of salmonella isolated during 1961-1963 in the Kuibishov rayon of Moscow are given. Salmonella were isolated from 135 persons including 37 healthy food plant workers and 87 persons with a diagnosis of acute gastroenteritis or food poisoning. All isolated cultures displayed typical morphological and biochemical properties. Most of the salmonella strains belonged to

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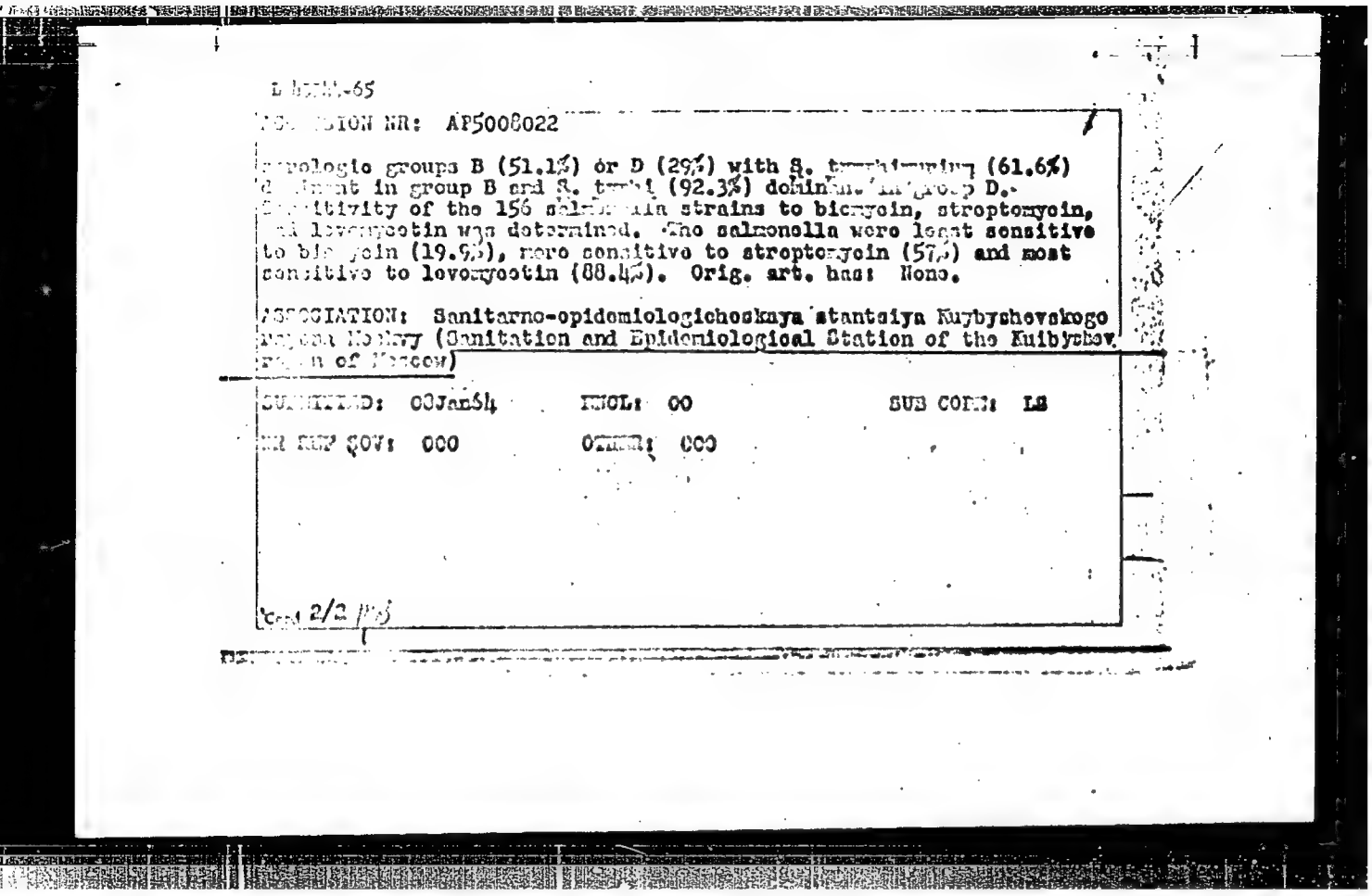

L [illegible]-65

[illegible]SION NR: AP5008022

[illegible]rologic groups B (51.1%) or D (29%) with S. t[illegible] (61.6%) d[illegible]nant in group B and S. t[illegible] (92.3%) domin[illegible] in group D. [illegible]sitivity of the 156 salm[illegible]ella strains to bicyycin, streptomycin, [illegible] levomycetin was determined. The salmonella were least sensitive to bic[illegible]ycin (19.9%), more sensitive to streptomycin (57%) and most sensitive to levomycetin (88.4%). Orig. art. has: None.

ASSOCIATION: Sanitarno-opidemiologicheskaya stantsiya Kuybyshevskogo [illegible] Moskvy (Sanitation and Epidemiological Station of the Kuibyshev [illegible]n of Moscow)

SUBMITTED: 03Jan64 ENCL: 00 SUB CODE: LS

NR REF SOV: 000 OTHER: 000

Card 2/2 [illegible]

[illegible], [illegible]; VOLKOVA, T.P.; CHERKES, F.K.; SHAGINAYA, E.N.; SHUBNYY, A.I.

Characteristics of pasteurella isolated in Kuybyshev District of Moscow in 1941-1943. Zhur.mikrobiol., epid. i immun. 42 no.3:141-145. (MIRA 18:6)

1. Sanitarno-epidemicheskaya stantsiya Kuybyshevskogo rayona Moskvy.

SUPRAT, Gh.

"Study of the economic history of Rumania," Vol.I. Reviewed by Gh.Suprat. Probleme econ 15 no.1:146-152 Ja '62.

SUPRENENKO, M.

Dawn of the new world. Nauka i zhyttia 12 no.11:2 of cover, 1-3 N '62. (MIRA 16:1)

1. Chlen-korrespondent AN UkrSSR, predsedatel' Nauchnogo soveta pri prezidiume AN UkrSSR po kompleksnoy probleme "Pobeda Velikoy Oktyabr'skoy sotsialisticheskoy revolyutsii i vosstanovleniye Sovetskoy vlasti na Ukraine (1917-1920 gg.)".
(Ukraine--History)

STASHCHUK, M.F.; SUPRICHOV, V.A.

Mineralogy of loess deposits of the Sivash Valley. Mat.z min. Ukr. no.2:79-91 '61. (MIRA 15:8)
(Sivash region--Loess)

L 22360-66 EWT(1)/T SCTB DD/JI

ACC NR: AP6005103 (A) SOURCE CODE: UR/0325/65/000/004/0189/0192

34
33
B

AUTHOR: Suprin, T. P.

ORG: none

TITLE: Stimulating effect of fungi extracts on Scenedesmus obliquus chlorella

SOURCE: Nauchnyye doklady vysshey shkoly. Biologicheskiye nauki, no. 4, 1965, 189-192

TOPIC TAGS: chlorella, plant growth, fungus

ABSTRACT: The effects of extracts prepared from imperfecti fungi (Fusella olivacea strain 5 c, Stemphylium sp. strain 1936, Helminthosporium sp. strain 146, Fusarium sambucinum strain 1297, Trichoderma sp. strain 6/9, and Trichoderum sp. strain 2074) on the growth of 10 to 15 day old Scenedesmus obliquus cultures were investigated in agar and liquid nutritive media. Growth of the cultures was determined 2 days after the addition of different extracts (1:10 to 1:10,000) by cell counts of experimental and control cultures. On the 3rd day culture suspensions were mixed by blowing air and drops were placed under a microscope (400 X) to determine the number of cells in at

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L 22360-66

ACC NR: AP6005103

least 3 fields of vision. Then the arithmetic mean was determined for experimental and control cultures. Most of the tested extracts were found to display a marked growth stimulator effect with concentrations of 1:100 and 1:000 and an inhibiting effect with a concentration of 1:10. It should be noted that not all the fungi extracts acted as growth stimulators and in some cases batches of extracts prepared from the same producer displayed different effects. Extracts of Helminthosporium and Stemphylium (batches 60 to 90) displayed only an inhibiting effect, even with a 1:1000 concentration. The most active growth stimulator properties were displayed by the Fusella olivacea extracts. Three of the 10 Fusella olivacea extracts tested stimulated growth by more than 300% and 6 of these displayed a stimulating effect even with a concentration of 1:10,000; 5 of these extracts produced an inhibiting effect with a concentration of 1:10. Action differences of the various imperfecti fungi extracts on the growth of Scenedesmus obliquus cultures is explained as follows. Each extract appears to contain at least two substances. One substance displays an inhibiting effect with high concentrations, covering the stimulating effect of the other substance. The latter displays a stimulating effect with low concentrations covering the inhibiting effect. The display of only inhibiting or stimulating action by an extract is attributed to the formation of only one substance. Orig. art. has: 3 tables.

SUB CODE: 06/ SUBM DATE: 15Jul64/ ORIG REF: 002/ OTH REF: 005

Card 2/2

SUPRON, L.F.; ZVEREV, F.P.; MUKHIN, A.P., prof., red.; POL'SKIY, S., red.; STEPANOVA, N., tekhn.red.

[Medical care of the population subjected to methods of mass destruction] Meditsinskoe obespechenie naseleniia v usloviiakh primeneniia sredstv massovogo porazheniia. Pod red. A.P.Mukhina. Minsk, Gos.izd-vo BSSR. Red.nauchno-tekhn.lit-ry, 1959. 407 p. (MIRA 12:9)

(ATOMIC MEDICINE)

SUPRON, L.F., dots., otv. red.; ARINCHIN, N.I., prof., red.; GEL'BERG, S.I., prof., red.; KLEPATSKIY, B.I., prof., red.; LIBERZON, G.Ya., prof., red.; NOVIKOV, I.I., kand. med.nauk red.; RAZUMOVICH, A.N., assistent, red.

[Abstracts of the reports of the Fourth Scientific Session on the Problem: Physiology, Morphology and Pathology of the Cardiovascular System] Tezisy dokladov Nauchnoi sessii po probleme: Fiziologiia, morfologiia i patologiia serdechno-sosudistoi sistemy. Grodno, Grodnenskii med. in-t, 1962. 207 p. (MIRA 17:10)

1. Nauchnaya sessiya po probleme: Fiziologiya, morfologiya i patologiya serdechno-sosudistoy sistemy, 4th, 1962. 2. Zaveduyushchiy kafedroy patologicheskoy fiziologii Grodenskogo meditsinskogo instituta (for Supron). 3. Zaveduyushchiy kafedroy normal'noy fiziologii Grodenskogo meditsinskogo instituta (for Arinchin). 4. Kafedra normal'noy anatomii Grodenskogo meditsinskogo instituta (for Novikov). 5. Zaveduyushchiy kafedroy mikrobiologii Grodenskogo meditsinskogo instituta (for Gel'berg). 6. Zaveduyushchiy kafedroy obshchey khirurgii Grodenskogo meditsinskogo instituta (for Klepatskiy). 7. Zaveduyushchiy kafedroy nervnykh bolezney Grodenskogo meditsinskogo instituta (for Liberzon). 8. Kafedra biokhimii Grodenskogo meditsinskogo instituta (for Razumovich).

[redacted], Zofia

Organism reaction of a child after intracutaneous BCG vaccination. Pediat. Polska 22 no.5:587-606 My '47.

1. Z Zakładu Mikrobiologii Instytutu Matki i Dziecka w Warszawie Dyrektor Instytutu: prof. dr med Fr. Groer. Kierownik Zakładu: prof. dr med. I. Fleck. Adres: Warszawa, ul. Kasprzaka 17/ Instytut Matki i Dziecka.

(BCG VACCINATION, inj. eff.
inflamm., specific & non-specific, in child. (Pol))
INFLAMMATION, in inf. & child
specific & non-specific, after BCG vacc. (Pol))

MARYNOWSKA, Hanna; SUPRONOWICZ, Edward

Tuberculin provocation of leukergy and erythrocyte sedimentation rate in tuberculosis in children. Gruzlica 27 no.10: 1005-1017 O '59.

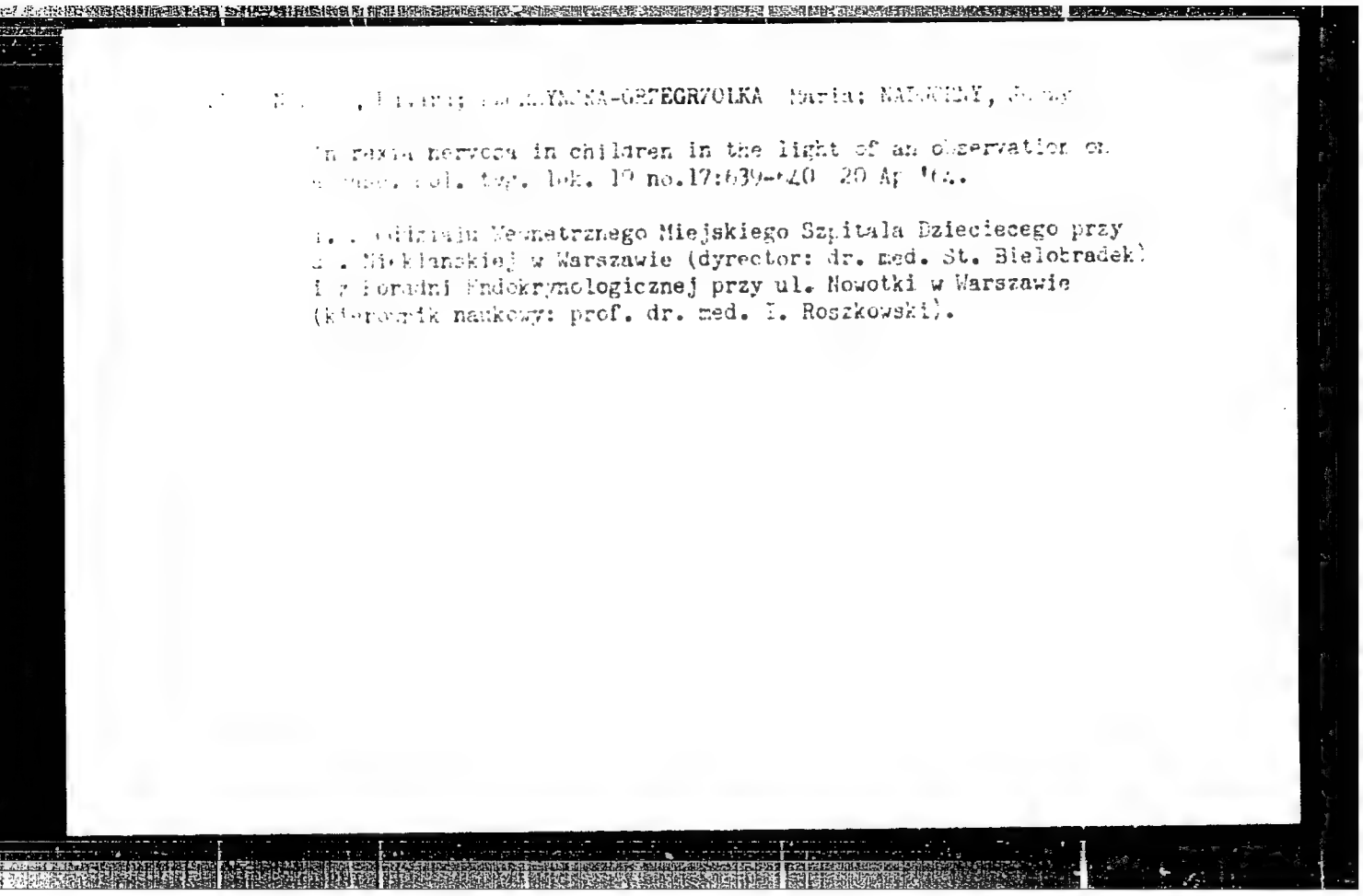
1. Z Kliniki Gruzlicy Dziecięcej Instytutu Matki i Dziecka. Kierownik: prof.dr. H. Marynowska.
(LEUKOCYTES)
(TUBERCULIN REACTION)

MARYNOWSKA, Hanna; SUPRONOWICZ, Edward

Double and single reaction tuberculin allergometry in connection with tuberculin leukergic tests in tuberculous children. Pediat. polska 36 no.3:229-239 '61.

1. Z Kliniki Gruzlicy Dzieci Instytutu Matki i Dziecka w Warszawie Kierownik Kliniki: prof. dr med. H. Marynowska Dyrektor Instytutu: prof. dr med. F. Groer.

(TUBERCULIN REACTION in inf & child)



[illegible], Ewa; [illegible]-GRZEGRZOLKA, Maria; [illegible], Jerzy

[illegible] in reaction nervosa in children in the light of an observation of [illegible]. Pol. tyg. lek. 19 no.17:639-640 20 Ap '64.

1. [illegible] Oddziału Wewnętrznego Miejskiego Szpitala Dziecięcego przy ul. Niekłańskiej w Warszawie (dyrektor: dr. med. St. Bielobradek) i z Poradni Endokrynologicznej przy ul. Nowotki w Warszawie (kierownik naukowy: prof. dr. med. I. Roszkowski).

SUPRONOWICZ, Ewa

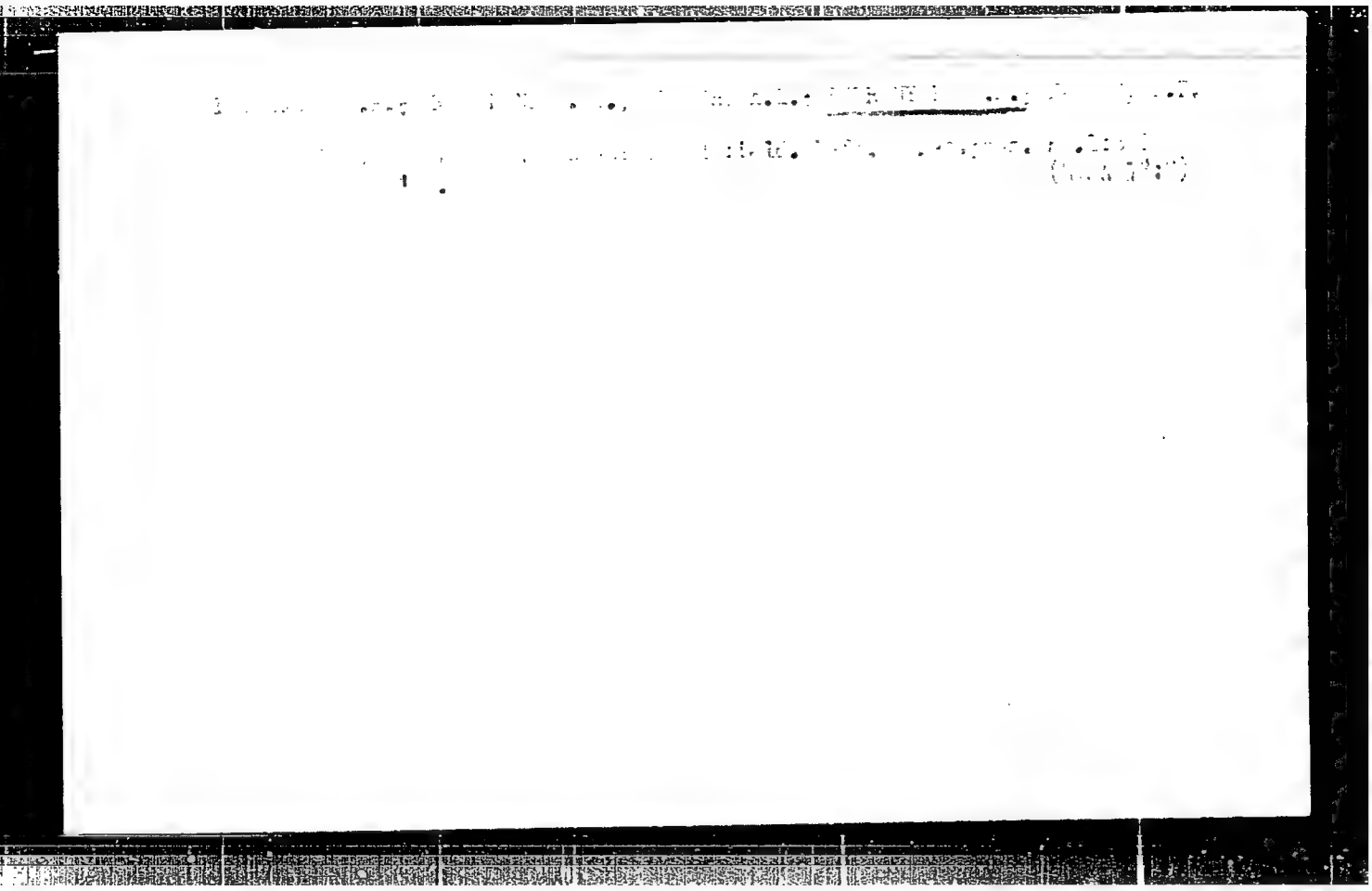
General results of psychoprophylactic method in painless lator.
Gin. polska 27 no.6:785-789 Nov-Dec 56.

1. Z Kliniki Poloznictwa i Chorob Kobiecych P.A.M. w Szczecinie Kier. prof. dr. T. Zwolinski, i III Kliniki Poloznictwa i Chorob Kobiecych A.M. w Warszawie Kier. doc. dr. J. Lesinski.
(LABOR
painless, psychoprophylactic method (Pol))

FROLOVA, N.I.; CHERKES, F.K.; VAYNTRAUB, E.A.; VORONINA, T.P.; MONASZON, R.I.; SPASSKAYA, Z.N.; SUPRONYUK, A.K.

Authors' abstracts. Zhur.mikrobiol., epid. i immun. 42 no.2:141 F '65. (MIRA 18:6)

1. Sanitarno-epidemiologicheskaya stantsiya Kuybyshevskogo rayona Moskvy.



SUPRONYUK, K.S.

Change in the color and the degree of pyritization of Permian rocks as a petroleum-prospecting index in the Dnieper-Donets Lowland. Neft. i gaz. prom. no.2:16-19 Ap-Je '64.
(MIRA 17:9)

KORENEVSKIY, S.M.; SUPRONYUK, K.S.

Isolation of the Kramatorsk series and the stratification of its potassium-bearing horizons in the western part of the Dnieper-Donets Lowland. Dokl. AN SSSR 165 no.5:1143-1146 D '65. (MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut i Trest "Chernigovneftegazrazvedka". Submitted April 27, 1965.

L 07408-67 EWT(1) IJP(c) GD/AT

ACC NR: AT6020574 (N) SOURCE CODE: UR/0000/65/000/000/0126/0133

AUTHOR: Sukhomlin, Ye. A.; Supruchenko, V. A.; Reva, N. I.; Tolok, V. T. 62 B+1

ORG: none

TITLE: Dissipation of plasma oscillations excited in a current-carrying plasma

SOURCE: AN UkrSSR. Vysokochastotnyye svoystva plazmy (High frequency properties of plasma). Kiev, Naukovo dumka, 1965, 126-133

TOPIC TAGS: plasma heating, plasma oscillation, plasma conductivity, plasma containment

ABSTRACT: The heating and containment of plasma in a strong magnetic field in the presence of instabilities caused by "run-away" electrons is investigated. The experiment consists of a 100 ka linear discharge in hydrogen, characterized by the absence of gross hydrodynamic instabilities. The "run-away" current was monitored to study the onset of two-stream instability and the resultant thermalization of the plasma. In the absence of collisions the anomalous diffusion observed is attributed to an increase in the kinetic pressure of electrons in the center of the discharge. This effect was used to estimate the electron temperature from the time of arrival of the expanding plasma at the tube wall. The heating time, measured by observation of the emitted x-radiation and intense microwave bursts, is much shorter than that which can

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L 07[illegible]-67

ACC NR: AT6020574

be explained by collisional heating. The very high final temperature of the electrons (2 kev) and short heating time correspond to the postulated collective process of heating by a two-stream instability. Orig. art. has: 4 figures.

SUB CODE: 20/ SUBM DATE: 19Nov65/ ORIG REF: 008/ OTH REF: 005

Card 2/2

MARINA, I., prokuror (Irkutsk); SALEY, A.; KISELEV, P., dispetcher; KOVESHNIKOV, P. (Rostovskaya obl., Belokalitvinskiy rayon); BORGUL', A.; SUPRUN, A. (Khar'kov); MUSAYEV, A.

Readers suggest, advise and criticize. Sov. profsoiuzy 19 no.13:36-37 Jl '63. (MIRA 16:9)

1. Chlen fabrichnogo komiteta Grodnenskogo tonkosukonnogo kombinata (for Saley). 2. Makeyevskiy koksokhimicheskiy zavod (for Kiselev). 3. Predsedatel' rabochego komiteta Vedenovskogo sovkhoza, Kokchetavskaya obl. (for Borgul'). 4. Vagonnoye depo stantsii Kirovabad Azerbaydzhanskoy zheleznoy dorogi (for Musayev).
(Trade unions)

SUPRUN, Aleksandr Makarovich

[An income of 40,000 rubles from a hectare of hemp] 40,000 rublei dokhoda s gektora posevov konopli. [Moskva, Ministerstvo sel'skogo khoziaistva SSSR, 1955. (MLRA 9:12)

(Hemp)

SOPRUN, A.K., inzh.

Effect of wear on the lowering of the power indices of suction dredges. Mekh. stroi. 20 no.9:12-13 S '63. (MIRA 16:10)

(Dredging machinery)

[illegible] EWA(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) Pf-4
[illegible]5/000/000/0083/0083

AUTHOR: Suprun, A. N.

TITLE: Device for calculating a solid cylindrical shaft for twisting. Class 42, No. 166521

SOURCE: Byulleten' izobretenii i tovarnykh znakov, no. 4, 1965, 83

TOPIC TAGS: shaft, torsion meter

ABSTRACT: This Author Certificate presents a device for calculating a solid cylindrical shaft for twisting, containing a conformal mapping device, recording device, and multiplication units. To increase the calculation rate with accuracy sufficient in practice, to simplify the circuit and design, and to decrease the [illegible] parameters of the shaft cross [illegible] operational amplifiers [illegible] unit is connected to the multiplication units. The device also contains further units whose outputs are connected through another set of operational amplifiers to

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L 34832-65
ACCESSION NR: AP5007463

the recording device. The inputs of the divider units are connected through a third set of identical operational amplifiers to the outputs of the multiplication units.

ASSOCIATION: none

SUBMITTED: 07Oct63 ENCL: 00 SUB CODE: AS, IE

NO REF SOV: 000 OTHER: 000

Card 2/2

SUPRUN, A. P.

SUPRUN, A. P.: "Investigation of the simultaneous polycondensation of benzol and of the halide derivative of benzol with dichloroethane." Acad Sci USSR. Inst of Organoelemental Compounds. Moscow, 1956.
(Dissertation for the Degree of Candidate in Chemical Sciences.)

SO: Knizhnaya Letopis', No. 26, 1956

[redacted], A. V., [redacted], G. S.

"Polycondensation of the system benzol-chlorobenzene-dichlor-ethane," paper presented at the 5th Congress on the Chemistry and Physics of High Polymers, 27 Jan-2 Feb 57, Moscow, Organic Chemistry Research Inst.

B-3,081,395

AUTHORS: Kolesnikov, G. S., Korshak, V. V. 62-58-4-16/32
Suprun, A. P.

TITLE: Synthesis of Polyarylene Alkyls (Sintez poliarilenalkilov). Communication 4. Temperature Influence on the Course of the **Copolycondensation** of Benzene and Chlorobenzene with Dichloroethane (Soobshcheniye 4. Vliyaniye temperatury na techeniye sovmestnoy polikondensatsii benzola i khlorbenzola s dikhloretanom)

PERIODICAL: Izvestiya Akademii Nauk SSSR, **Otdeleniye** Khimicheskikh Nauk, 1958, Nr 4, pp. 492-49[illegible] (USSR)

ABSTRACT: Until now mainly the influence of the mixture of initial substances on the properties of the forming polycondensation products has been investigated. It was assumed that the compositions of the copolymer and the mixture of initial substances was identical. This is, however, only correct when a certain polycondensation equilibrium exists. When this equilibrium does not exist the initial substances can be made use of only insufficiently. This again leads to the formation of copolymers as could be

Card 1/3

Synthesis of Polyarylene Alkyls. Communication 2 62-58-4 16/32
Temperature Influence on the Course of the
Copolycondensation of Benzene and Chlorobenzene with
Dichloroethane

observed in the copolymerization of vinyl compounds. Then such copolymers form, the composition of which is subject to changes during polycondensation. Until now the process of common polymerization has not been investigated to such an extent that the reason for these changes of the forming copolymers could be explained. In the present paper the authors report on the carried out investigation of the influence of the reaction temperature on the course of the common polycondensation of 1,2-dichloroethane with benzene and chlorobenzene in the presence of aluminum chloride. It was shown that with increasing prolongation of the reaction also the content of chlorine in the polymer increases. From this is to be concluded that the activity of benzene and chlorobenzene in the interaction with chloroethane is different. Furthermore an equation was suggested which connects the yield in copolymers with the temperature and the duration of reaction.
There are 5 figures, 3 tables and 6 references, 2 of which are Soviet.

Card 2/3

Synthesis of Polyarylene Alkyls. Communication 4. Temperature Influence on the Course of the Copolycondensation of Benzene and Chlorobenzene with Dichloroethane 62-58-4-16/32

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute for Elemental-organic Compounds, AS USSR)

SUBMITTED: November 1, 1956

AVAILABLE: Library of Congress

1. Vinyl compounds--Copolymerization

Card 3/3

62-58-5-11/27

AUTHORS: Kolesnikov, G. S., Korshak, V. V., Suprun, A. P.

TITLE: Synthesis of the Polyarylenalkyles (Sintez poliarilenalkilov) Communication 5: The Influence of the Concentration of the Catalyst on the Course of Common Polycondensation of Benzene and Chlorobenzene With 1,2-Dichloroethane (Soobshcheniye 5. Vliyaniye kontsentratsii katalizatora na techeniye protsessa sovmestnoy polikondensatsii benzola i khlorbenzola s 1,2-dikhloretanom)

PERIODICAL: Izvestiya Akademii Nauk SSSR,Otdeleniye Khimicheskikh Nauk, 1958, Nr 5, pp. 600 - 604 (USSR)

ABSTRACT: In the preceding report the authors reported on the results of investigation of the influence of temperature of the reaction on the course of the process of common polycondensation of benzene and chlorobenzene with dichloroethane. Continuing the investigations in this field, the authors dealt in the present report with the influence of the concentration of the catalyst on the further course of polycondensation. The influence of the concentration of aluminumchloride on the course of common

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Synthesis of the Polyarylenalkyles.Communication 5: 62-58-5-11/27
The Influence of the Concentration of the Catalyst on the Course of Common Polycondensation of Benzene and Chlorobenzene With 1,2-Dichloroethane

polycondensation of the 1,2-dichloroethane with benzene and chlorobenzene was investigated. It was found that the chlorine-content in the copolymer increases according to the prolongation of the reaction period. This confirms the already previously found heterogeneity of the relative activity of benzene and chlorobenzene in the interaction with dichloroethane. Further, the influence of the change of the reaction-temperature according to the change of concentration of the catalyst on the course of common polycondensation of dichloroethane was compared with that of benzene in the presence of aluminumchloride. There are 5 figures, 4 tables and 4 references, 3 of which are Soviet.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute forElemental-organic Compounds AS USSR)

SUBMITTED: November 1, 1956

Card 2/2 1. Cyclic compounds--Synthesis 2. Aluminum chlorides--Catalytic properties 3. Benzenes--Condensation reactions 4. Chlorobenzene--Condensation reactions 5. Dichloroethane--Condensation reactions

62-58-5-12/27

AUTHORS: Kolesnikov, G. S., Korshak, V. V., Suprun, A. P.

TITLE. Synthesis of the Polyarylenalkyles (Sintez poliarilenalkilov) Communication 6: Influence of the Correlation of Initial Components on the Course of Process of the Common Polycondensation of Benzene and Chlorobenzene With 1,2-Dichloroethane(Soobshcheniye 6. Vliyaniye sootnosheniya iskhodnykh komponentov na techeniye protsessa sovmestnoy polikondensatsii benzola i khlorbenzola s 1,2-dikhloretanom)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Khimicheskikh Nauk, 1958, Nr 5, pp. 605 - 613 (USSR)

ABSTRACT: In previous works the influence of the reaction-temperature and of the concentration of the catalyst on the course of the common polycondensation of benzene and chlorobenzene with 1,2-dichloroethane in the presence of aluminumchloride was discussed (References 1,2). The investigation described in the present report, served for the purpose of determining the influence of the correlation of the components in the mixture of

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Synthesis of the Polyarylenalkyles.Communication 6: Influence of the Correlation of Initial Components on the Course of Process of the Common Polycondensation of Benzene and Chlorobenzene With 1,2-Dichloroethane

reactions- (in first place of the aromatic hydrocarbons). The applied method of performance was the same as that applied in the previous test. It results from tables 1 and 2 and from diagram 1 that with divided polycondensation of the benzene-dichloroethane-and chlorobenzene-dichloroethane-systems, the velocity of this process is substantially higher in the case of the polycondensation of chlorobenzene with dichloroethane. The coefficient of polymerization of the polycondensation-product of benzene with dichloroethane is higher than the coefficient of polymerization of the polymer (obtained from chlorobenzene and dichloroethane). The extent of the relative activity of chlorobenzene was determined (in which case the activity of benzene was assumed to be "1"). It was shown that the activity of these aromatic hydrocarbons does not depend on their concentration in the initial mixture. Moreover, an empiric equation was found which combines the structure

Synthesis of the Polyarylenalkyles. Communication 6: Influence of the Correlation of Initial Components on the Course of Process of the Common Polycondensation of Benzene and Chlorobenzene With 1,2-Dichloroethane

62-58-5-12/27

of the copolymer (with its yield) with the correlation of the aromatic hydrocarbons in the initial mixture. An increase in the concentration of dichloroethane in the mixture of reaction causes a corresponding reduction of the yield of the copolymer. There are 5 figures, 1o tables and 5 references, 4 of which are Soviet.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elemental-organic Compounds of the AS USSR)

PUBLISHED: November 1, 1958

1. Cyclic compounds--Synthesis 2. Benzenes--Condensation reactions 3. Chlorobenzene--Condensation reactions 4. Dichloroethane--Condensation reactions 5. Aluminum chloride catalysts--Applications

Card 3/3

AUTHORS: Kolesnikov, G. S., Korshak, V. V., Suprun, A. P. 62-58-6-18/37

TITLE: The Synthesis of Polyarylalkyls (Sintez poliarilenalkilov) Communication 7. Joint Polycondensation of the Systems Dichloroethane-Benzene-Fluorobenzene and Dichloroethane-Chlorobenzene--Fluorobenzene (Soobshcheniye 7. Sovmestnaya polikondensatsiya sistem dikhloretan-benzol-ftorbenzol i dikhloretan-khlorbenzol--ftorbenzol)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye khimicheskikh nauk, 1958, Nr 6, pp. 763 - 766 (USSR)

ABSTRACT: In the preceding papers the authors spoke about the results of the investigation of the joint polycondensation of dichloroethane with benzene and chlorobenzene. For the purpose of explaining the behavior of other halide-substituted aromatic hydrocarbons in the case of joint polycondensation with dichloroethane and benzene the authors investigated the polycondensation of the systems dichloroethane-benzene-fluorobenzene and dichloroethane--chlorobenzene-fluorobenzene in the presence of aluminum chloride. The relative activity of the fluorobenzene is much lower

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The Synthesis of Polyarylalkyls. Communication 7. SOV 62-58-6-18/37
Joint Polycondensation of the Systems Dichloroethane-Benzene-Fluorobenzene and Dichloroethane-Chlorobenzene-Fluorobenzene

than that of chlorobenzene. The polycondensation of fluorobenzene with dichloroethane was carried out for the first time by two of the authors of this paper and Fedorova (Ref 4). There are 3 figures, 3 tables, and 4 Soviet references.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elemental-organic Compounds AS USSR)

SUBMITTED: November 12, 1956

1. Benzene-ethyl chloride systems—Chemical reactions
2. Condensation reactions 3. Aluminum chloride—Chemical effects

Card 2/2

AUTHORS: Krongauz, Ye. S., Suprun, A. P. (Moscow) SOV/74-27-9-2/5

TITLE: Brief Survey of the Publications on Isotactic Polymers (Kratkiy obzor rabot po izotakticheskim polimeram)

PERIODICAL: Uspekhi khimii, 1958, Vol 27, Nr 9, pp 1056-1083 (USSR)

ABSTRACT: In the beginning the authors point out that in the course of the last decades the interest of chemists has been directed to the investigation of the polymerization of unsaturated hydrocarbons (and their derivatives). This was mainly because important products had to be produced for national economies. The production of various polymers is discussed, beginning with the production of new stereoregular polymers of the α-olefines by Shil'dknekht and Natt. In the USSR the production of stereoregular polymers was initiated by the publications of Topchiyev and Krentsel' (Refs 3,4). The different polymerization reactions, especially the stereospecific ones, are discussed (Refs 28-36). In the next chapter the authors deal with the mechanism and the kinetics of the stereospecific polymerization (Refs 37,39). In this special chapter the isotactic polypropylene is discussed. In industrial practice those plastics are of especial interest which are made of products es-

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Brief Survey of the Publications on Isotactic Polymers

pecially rich in isotactic polymers. Recently the so-called fractionation method has been employed (to produce pure isotactic polymers); this has been done by direct polymerization (Refs 44-46). The authors then deal in detail with the block polymers (Refs 44-49) as well as with the stereoisomeric polymers of diolefines (Refs 20,44,50-54). The polyvinyl chloride produced by means of radical polymerization, the isotactic polybutene, and isotactic polystyrene are then discussed briefly. The synthesis and the properties of well crystallized α-olefines with ramified chain are dealt with in a special chapter. Finally the authors discuss the polymerization of acetylene, and the copolymers of the α-olefines (Refs 61,62,64). There are 20 figures, 12 tables, and 64 references, 12 of which are Soviet.

KOLESNIKOV, G.S.; SUPRUN, A.P.; SOBOLEVA, T.A.

Carbon chain polymers and copolymers. Part 14: Copolymerization of ethylene with unsaturated compounds in the presence of boron alkyl compounds. Vysokom.soed. 1 no.4:627-634 Ap '59. (MIRA 12:9)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Boron compounds) (Ethylene) (Polymerization)

81567
S/190/60/002/03/11/011
B020/B066

5.3831

AUTHORS: Kolesnikov, G. S., Suprun, A. P., Soboleva, T. A., Plate, A. F., Slonimskiy, G. L., Pryanishnikova, M. A., Tarasova, G. A.

TITLE: Polymers and Copolymers With Carbon Chains. XXI. Copolymers on the Basis of Bicyclo (2,2,1) Heptadiene-2,5 and 1,2,3,4,7,7-Hexachloro Bicyclo (2,2,1) Heptadiene-2,5

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 3, pp. 451-455

TEXT: The authors attempted the polymerization of dissolved bicycloheptadiene and hexachloro bicycloheptadiene in the presence of BF_3 and the polymerization of hexachloro bicycloheptadiene in the presence of benzoyl peroxide, tert-butyl peroxide, azoisobutyric acid dinitrile, tri-n-propyl boron, and $TiCl_4$. Hexachloro bicycloheptadiene does not form polymers (Ref. 4). Bicycloheptadiene (Ref. 5) forms polymers in methylene chloride in the presence of BF_3 (at -70°, 4 hours) in a 75% yield. The copolymerization of bicycloheptadiene with hexachloro

81587

Polymers and Copolymers With Carbon Chains. XXI. Copolymers on the Basis of Bicyclo (2,2,1) Heptadiene-2,5 and 1,2,3,4,7,7- -Hexachloro Bicyclo (2,2,1) Heptadiene-2,5

S/190/60/002/05/11/014
B020/B066

bicyclopentadiene and other monomers (styrene, vinyl acetate, methyl methacrylate) was studied to clarify the influence of the copolymer composition upon their solubility and thermodynamic properties. The authors synthesized copolymers from equimolecular quantities of dissolved bicycloheptadiene and hexachloro bicycloheptadiene in the presence of BF_3 (2 mole%) and in bulk in the presence of benzoyl peroxide and tri-n-propyl boron (0.5 mole%). The results obtained are given in Table 1. The curves of the thermodynamic properties of the copolymers of bicycloheptadiene and hexachloro bicycloheptadiene are presented in Fig. 1. According to an X-ray structural analysis, the resultant copolymers are amorphous. The properties of copolymers from equimolecular quantities of bicycloheptadiene and styrene are also given (Table 2). The results of the copolymerization of equimolecular quantities of bicycloheptadiene with methyl methacrylate in bulk in the presence of azoisobutyric acid dinitrile, benzoyl peroxide, and tert-butyl peroxide showed that the activity of methyl methacrylate

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Polymers and Copolymers With Carbon Chains. XXI. Copolymers on the Basis of Bicyclo (2,2,1) Heptadiene-2,5 and 1,2,3,4,7,7--Hexachloro Bicyclo (2,2,1) Heptadiene-2,5

S/190/60/002/03/11/[illegible]
B020/B066

is much higher than that of bicycloheptadiene. The copolymers obtained contain a total of about 1 per cent of bicycloheptadiene links, which is not sufficient for an increase of the thermal stability of polymethyl methacrylate. The curves of the thermodynamic properties of the copolymers of bicycloheptadiene and styrene, as well as of bicycloheptadiene and vinyl acetate are given in Fig. 2. The latter copolymer was synthesized for the first time. The copolymers of bicycloheptadiene and hexachloro bicycloheptadiene with a molar ratio of 70.5 : 29.5 are well soluble in dichloro ethane and toluene, and are highly elastic at elevated temperatures (250 - 350°). The copolymer of bicycloheptadiene and vinyl acetate is also highly elastic in a wide temperature range (60 - 350°). There are 2 figures, 2 tables, and 6 references: 3 Soviet, 2 US, and 1 British.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy (Institute of Elemental-organic Compounds). Institut organicheskoy khimii im. N. D. Zelinskogo AN SSSR (Institute of Organic

Card 3/4

KOLESNIKOV, G.S.; SUPRUN, A.P.; SOBOLEVA, T.A.; YERSHOVA, V.A.

Carbochain polymers and copolymers. Part 26: Polymerization and copolymerization of 1,1,2-trichloro-1,3-butadiene. Vysokom. soed. 2 no.8:1266-1269 Ag '60. (MIRA 13:9)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Butadiene) (Polymerization)

KRISHEVSKIY, M.; PALCHINSKIY, B.; SUPRUN, A.P. [translator]

Viscosimetry of polymer solutions. Part 1: Capillary viscometer with electronic recording of flow time. Vysokom.soed. 3 no.6:936-942 Je '61. (MIRA 14:6)

1. Politekhnicheskiy institut, Lodz'.
(Viscosimeter) (Polymers)

37bb2
S/190/62/004/005/019/026
B110/B108

AUTHORS: Kolesnikov, G. S., Suprun, A. P., Soboleva, T. A., Yershova, V. A., Bondarev, V. B.

TITLE: Carbochain polymers and copolymers. XXXIX. Copolymerization of 1,1,2-trichlorobuta-1,3-diene with other unsaturated compounds

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 5, 1962, 743-748

TEXT: Determinations were made of the relative activities of 1,1,2-trichlorobuta-1,3-diene and styrene (10:90; 25:75; 50:50; 75:25; and 90:10) and of the composition of their copolymers at low degrees of conversion (5 - 7,5). On the basis of the relative activities $r_1 = 0.07 \pm 0.03$ (styrene) and $r_2 = 1.18 \pm 0.08$ (trichlorobutadiene), the composition of the copolymer was plotted versus the composition of the monomer mixture. In order to raise the softening point (~50°C) of polytrichlorobutadiene, 1,1,2-tri-

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S/190/62/004/005/019/026
B110/B108

Carbochain polymers and copolymers...

chlorobuta-1,3-diene was copolymerized with acrylonitrile, vinyl chloride, and bicyclo-(2,2,1)-hepta-2,5-diene. During bulk copolymerization with acrylonitrile at a ratio of 50:50, only 10 mole% of acrylonitrile radicals was added to the copolymer. Thereupon, copolymerization was also carried out in a water-oil emulsion (1.8:1) with mersolate as an emulsifier, and benzoyl peroxide and ammonium persulfate as initiators. With the use of ammonium persulfate, only trichlorobutadiene homopolymers could be obtained from mixtures of 10 - 80 mole% of trichlorobutadiene and benzoyl peroxide. With acrylonitrile radicals of less than 40 mole%, the copolymer was completely soluble in toluene, while with more than 40 mole%, it was only partially soluble. Extraction of a partially soluble copolymer with toluene gave two fractions: (1) 88% by weight of a white powder, soluble in toluene and containing 39 mole% of acrylonitrile radicals; (2) a yellow powder, soluble only in dimethyl formamide and containing 65 mole% of acrylonitrile radicals. Either powder possessed a low softening point, but their thermomechanical curves differed considerably. The copolymerization of 1,1,2-trichlorobuta-1,3-diene with vinyl chloride was also carried out in an emulsion, whereby solid lumps and lattices were obtained at the

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Carbochain polymers and copolymers ...

same time. Their softening point is 50°C. The copolymerization of 1,1,2-trichlorobuta-1,3-diene with bicyclo-(2,2,1)-hepta-2,5-diene was carried out both in bulk and emulsion. Bulk polymerization was done with .1 mole% of benzoyl peroxide. Polymerization in emulsion lasted 15 hrs at room temperature and, in addition, 10 hrs at 50°C, resulting in light-yellow to dark-brown polymers. At a ratio of 36.5 mole% of trichloro-butadiene to 63.5 mole% of bicycloheptadiene, the softening point of this copolymer was 150 - 140°C. It was soluble in toluene and dichloroethane. There are 2 figures and 5 tables.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR
(Institute of Elemental Organic Compounds AS USSR)

SUBMITTED: April 17, 1961

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S/190/63/005/004/003/020
B101/B220

AUTHORS: Soboleva, T. A., Suprun, A. P., Kolesnikov, G. S.

TITLE: Carbochain polymers and copolymers. XLIV. Study of the effect of various factors on the polymerization of 1,1,2-trichloro-1,3-butadiene

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 5, no. 4, 1963, 487-491

TEXT: The effects of the nature and concentration of the initiator, the temperature and the reaction time were studied as to yield and molecular weight of the polymer obtained by mass polymerization of 1,1,2-trichloro-1,3-butadiene. Results: (1) At 80°C and with a reaction time of 230 min and an initiator concentration of 0.5 mole% the following yields (%) and intrinsic viscosities in benzene at 25°C (dl/g) were obtained: with benzoyl peroxide 88.5, 0.39; with azoisobutyric dinitrile 75.5, 0.30; with tert-butyl peroxide 28.5, 0.19; with cumene hydroperoxide 29.5, 0.30; with tri-n-propyl boron 24.0, 0.17; and without initiator 21.5, 0.33. (2) The effect of the initiator concentration was investigated using benzoyl peroxide at 80°C and 230 min reaction time. The initiator concentrations (mole%), yields (%) and intrinsic viscosities (dl/g) are given: 0.1, 45.5,
Card 1/2

0.23; 0.5, 88.5, 0.39; 1.5, 99.5, 0.20. (3) The polymer yield with 0.5 mole% benzoyl peroxide and 230 min reaction time increases from 1 % at 25°C to 96 % at 100°C. (4) Under equal conditions the intrinsic viscosity was ~0.5 at 25°C and ~ 0.1 at 40°C. (5) With 0.5 mole% benzoyl peroxide at 80°C the polymer yield was 30 % after 60 min and almost 100 % after 300 min reaction time. The intrinsic viscosity increased rapidly during the first 60 min but thereafter very slowly. (6) The following optimum values are given: 0.5 % benzoyl peroxide, 80°C, 360 min. The properties of the polymer thus obtained are: yield 99.9 %; intrinsic viscosity 0.43 dl/g; m.w. 71,000; specific weight 1.44; softening point +50°C. (7) It is evident from the IR spectrum of 1,1,2-trichloro-1,3-butadiene and its polymer that the polymer has a considerable number of CH_2 and CH groups at the double bond; this makes a further study of the mechanism of this reaction desirable. There are 4 figures and 3 tables.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Elemental Organic Compounds of AS USSR)

SUBMITTED: September 9, 1961

ACCESSION NR: AT4020704 S/0000/63/000/000/0128/0130

AUTHOR: Suprun, A. P.; Soboleva, T. A.; Lopatina, G. P.

TITLE: Polymerization and copolymerization of 3,3,3-trichloropropene

SOURCE: Karbotsepny*ye vy*sokomolekulyarny*ye soyedineniya (Carbon-chain macromolecular compounds); sbornik statey. Moscow, Izd-vo AN SSSR, 1963, 128-130

TOPIC TAGS: block polymerization, copolymerization, trichloropropene, polytrichloropropene, methyl methacrylate, benzoyl peroxide, vinyl acetate, styrene, acrylonitrile

ABSTRACT: The effect of temperature and reaction time on the block polymerization of 3,3,3-trichlorpropene was investigated and the thermomechanical properties of the polymer were studied. Copolymers of 3,3,3-trichloropropene with methyl methacrylate, vinyl acetate, styrene and acrylonitrile were also obtained by block polymerization. The reaction was carried out with 0.5 mol.% benzoyl peroxide under the influence of x-irradiation at different temperatures, the maximum yield being obtained at 70C. At 100C, the yield decreased. The experimental data are tabulated. "The authors would like to thank B. L. Tsetlin for carrying out the radiation polymerization." Orig. art. has: 1 figure and 2 tables.

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RM/WW

ACCESSION NR: AP3000686 S/0190/63/005/005/0639/0643 71 70

AUTHOR: Soboleva, T. A.; Suprun, A. P.; Kolesnikov, G. S.

TITLE: Carbon-chain polymers and copolymers. 46. The influence of various factors on the emulsion polymerization of 1,1,2-trichlorobuta-1,3-diene

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 5, no. 5, 1963, 639-643

TOPIC TAGS: carbon-chain polymers, emulsion polymerization, trichlorobutadiene, initiator, emulsifier

ABSTRACT: The present work is a continuation of an earlier investigation by the authors, with the difference that there the 1,1,2-trichlorobuta-1,3-diene was in bulk. In the present work a study was made of the ratio of phases, nature, and concentration of initiator, reaction temperature, reaction time, and emulsifier concentration in relation to the yields and molecular weights of the resultant polymers. The experiments were conducted in sealed, evacuated ampules. A maximum yield of polytrichlorobutadiene was obtained at a ratio of the aqueous to the oily phase of 1.8/1, with a concentration of the initiator (potassium persulfate) of 0.17 Mol%, at a temperature of 50C, a reaction time of approximately 5 hours, and with 1% of the emulsifier used. Under the above optimal conditions for the initiator, phase ratio, and temperature, and with an almost double concentration of

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ACCESSION NR: AP3000686

emulsifier and reaction time, a polytrichlorobutadiene of 3,400,000 molecular weight was obtained, as against the figure of 70,000 for the earlier work where the process of polymerization was conducted on bulk material. Orig. art. has: 3 tables and 3 figures.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Organoelemental Compounds, Academy of Sciences SSSR)

SUBMITTED: 04Oct61	DATE ACQ: 17Jun63	ENCL: 01
SUB CODE: CH	NO REF SOV: 003	OTHER: 000

Card 2/3 2

SUPRUN, A.P., kand.tekhn.nauk, inzhener-kontr-admiral

Communication systems using arificial earrh satellites. Mor. sbor. 46 no.5:56-64 My 63. (MIRA 17:1)

SOBOLEVA, T.A.; SUPRUN, A.P.; PAVLOVA, S.A.

Polydispersity of polymers of 1,1,2-trichloro-1,3-butadiene. Vysokom. soed. 6 no.1:89-91 Ja'64. (MIRA 17:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

PAVLOVA, S.A.; SOBOLEVA, T.A.; SUPRUN, A.P.

Viscosity and molecular weight of polytrichlorobutadiene.
Vysokom. soed. 6 no.1:122-124 Ja'64. (MIRA 17:5)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

SUPRUN, A.P.; SOBOLEVA, T.A.; LOPATINA, G.P.

Polymerization of 3,3,3-trichloropropene under pressure. Vysokom. soed. 6 no.4:726-728 Ap '64. (MIRA 17:6)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

GREBENSHCHIKOV, L.S.; SHKURATOV, O.G.; GIKAL, N.K.; SUPRUN, A.P.

The EPM-50 mine electrostatic precipitator. Gor. zhur. no.5:64-67 My '64. (MIRA 17:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tsvetnoy metallurgii.

ACCESSION NR: AP4032573 S/0190/64/006/004/0726/0728

AUTHORS: Suprun, A. P.; Soboleva, T. A.; Lopatina, O. P.

TITLE: Polymerization of 3,3,3-trichloropropene under pressure

SOURCE: Vysokomolek. soyedin., v. 6, no. 4, 1964, 726-728

TOPIC TAGS: methyl ethylene, propene, trichloropropene, trichloropropene polymerization, pressure polymerization, benzoyl peroxide initiator, radical polymerization mechanism, polytrichloropropene, polytrichloropropene thermomechanical property

ABSTRACT: Polymerization of 3,3,3-trichloropropene was conducted in special lead ampules placed in a high-pressure reactor. It was found that in the presence of 0.6 mole/% of benzoyl peroxide as initiator and at a temperature of 50C a yield of polytrichloropropene of 5, 19, and 31% respectively was obtained after 6 hours under 3000, 6000, and 7000 atmospheres. Without initiator, the yield of the polymer under 6000 atm at 50C and after 12 hours was only 4%. In the presence of 1 and 3 mole/% of the initiator it reached 50 and 75% respectively. The polymer was soluble in benzene, toluene, xylene, nitrobenzene, chloroform, carbon tetrachloride,

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ACCESSION NR: AP4032573

trichloroethylene and anisole. It had a molecular weight of 3500, an amorphous structure with small crystalline inclusions, and a softening point at 50C. The authors state that in the presence of benzoyl peroxide (without pressure application) the molecular weight of the resulting polytrichloropropene averages 1200, with 15% of it as high as 16 000. The high-molecular fraction differs in solubility and other properties from the main mass. Trichloropropene does not polymerize under normal pressure in the presence of 0.6 mole/% of initiator. Orig. art. has: 2 tables and 2 charts.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Organoelemental Compounds, AN SSSR)

SUBMITTED: 24May63 DATE ACQ: 11May64 ENCL: 00

SUB CODE: GH NO REF SOV: 002 OTHER: 000

Card 2/2

L 41150-65 EWG(j)/EPA(s)-2/EWT(m)/EPF(c)/EPR/EWP(j)/T/EWA(h)/EWA(1) Pc-4/
Pr-4/Ps-4/Pt-10/Peb RPL WW/GS/RM

ACCESSION NR: AT5002110 S/0000/64/000/000/0042/0045

AUTHOR: Freydlina, R. Kh.; Kolesnikov, G. S.; Slonimskiy, G. L.; Suprun, A. P.; Soboleva, T. A.; Belyavskiy, A. B.; Yershova, V. A.

TITLE: New chlorinated monomers for the synthesis of noncombustible polymers

SOURCE: AN SSSR. Institut neftekhimicheskogo sinteza. Sintez i svoystva monomerov (The synthesis and properties of monomers). Moscow, Izd-vo Nauka, 1964, 42-45

TOPIC TAGS: fire resistant polymer, polymer mechanical property, chlorinated polymer, [illegible]roalkene polymerization, telomerization, dehydrahalogenation, radiation polymerization

ABSTRACT: 3,3,3-Trichloropropene and 1,1,2-trichloro-1,3-butadiene, which have been [illegible] previously published studies, were prepared by a two step reaction and their [illegible] and copolymerization was studied in an effort to obtain noncombustible polymers. [illegible] Trichloropropene was synthesized [illegible] tetrachloropropane by telomerization [illegible] with [illegible] 2529, 1948) and dehydro[illegible] [illegible] solution to give a [illegible] 1,1,3-trichloropropene [illegible] as a by product. The latter

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L 41150-65
ACCESSION NR: AT5002110

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was also formed by isomerization during the block polymerization of 3,3,3-trichloropro- ... with benzoyl peroxide, and isomerization decreased the yield of solid polymer from ... at 100C. A ... low molecular liquid polymer was also formed. ... radiation and fraction- ... tetrahydrofuran or hot ... which have not been ... were formed with methyl methacrylate. ... trichloro ... prepared ... described ... conditions ... polymerization with ... have markedly higher ... than styrene and the polymers showed good stability ... resistance to cold inorganic ... strength and adhesion to various materials. "The authors thank B. I. ... for carrying out the irradiation polymerization tests." Orig. art. has 1 table and 4 formulas.

Card 2/3

L 41150-65

ACCESSION NR: AT5002116

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ASSOCIATION: None

SUBMITTED: 30Jul64 ENCL: 00 SUB CODE: OC, GC

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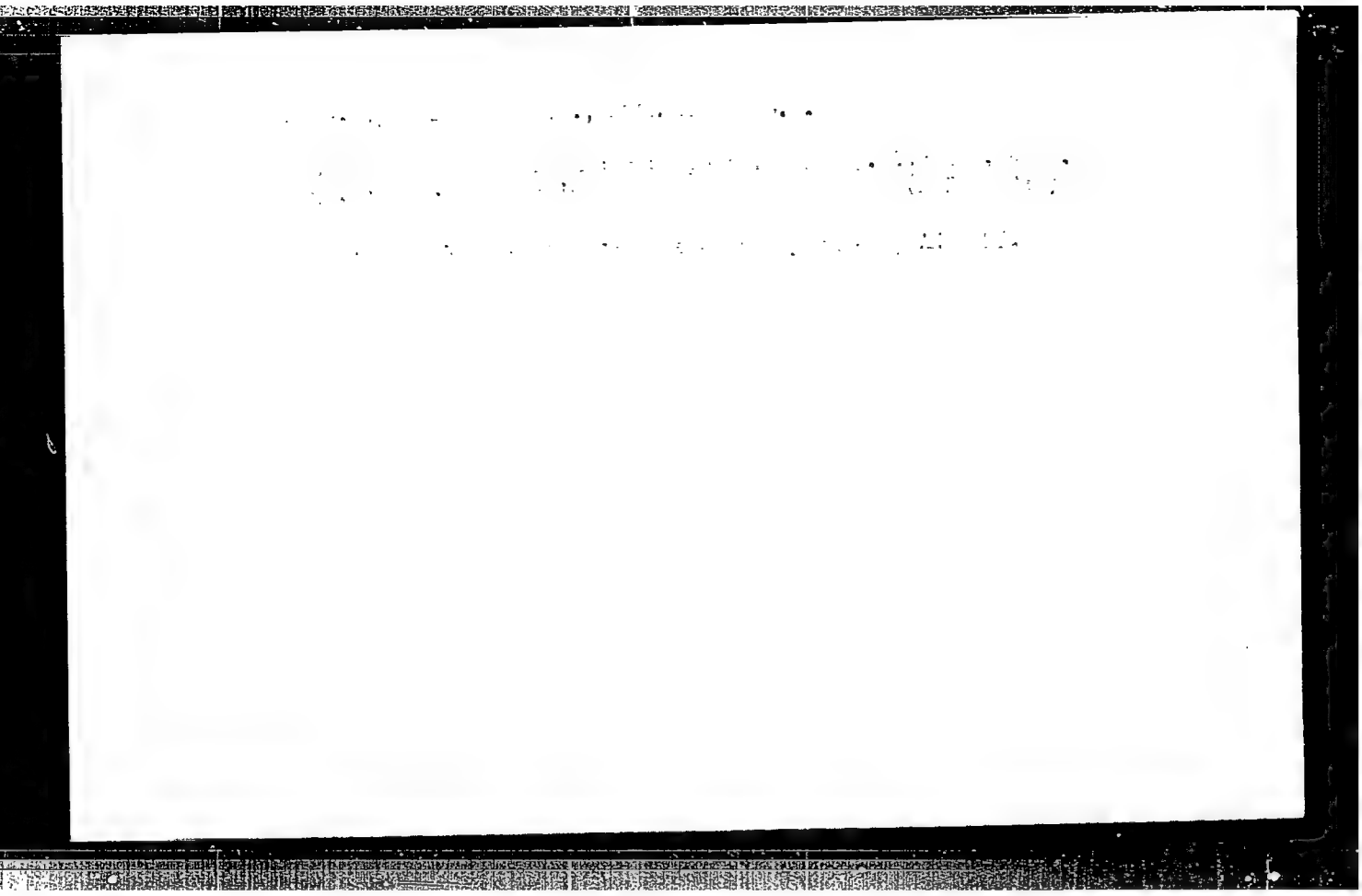
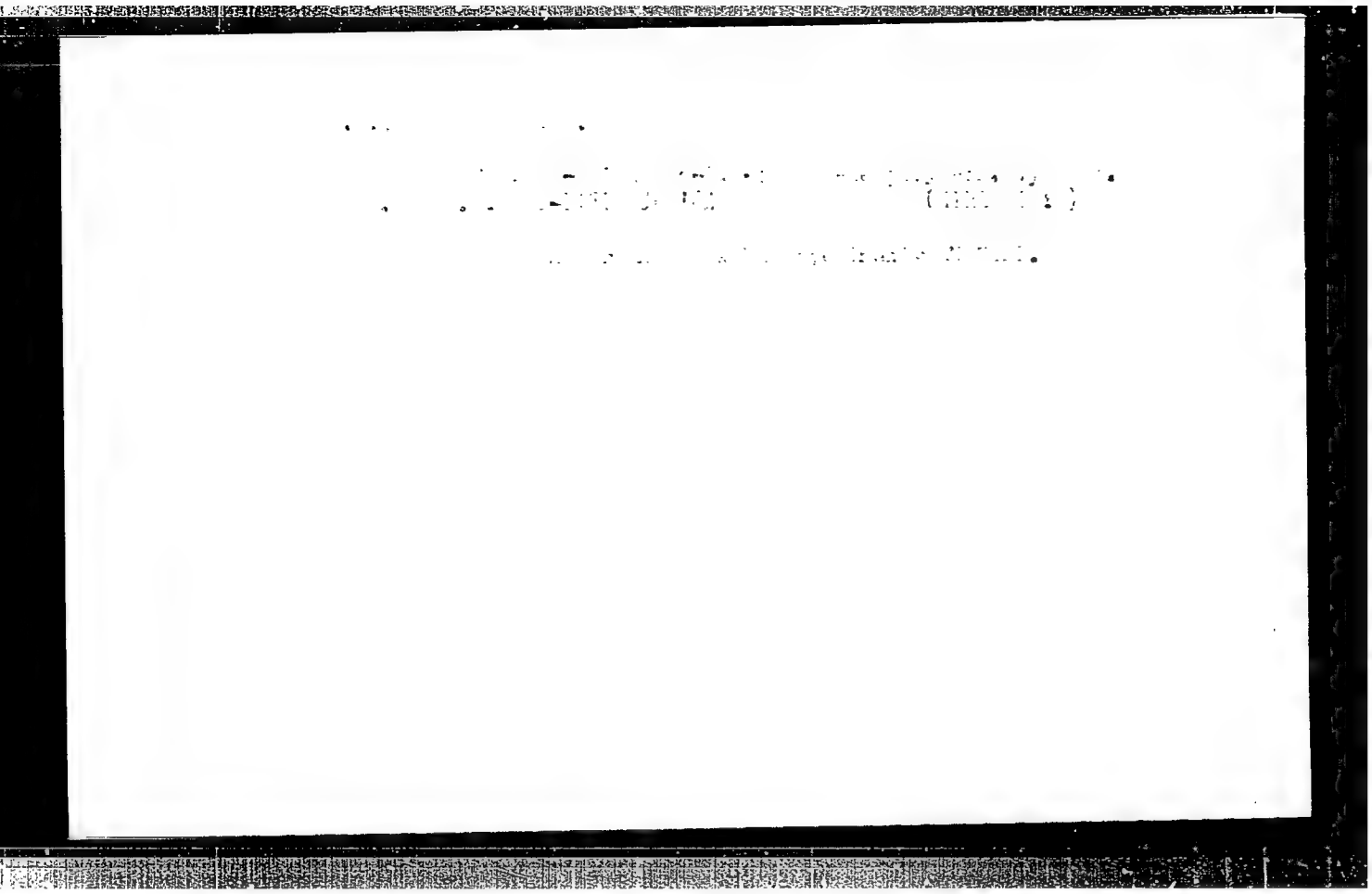
Card 1/1



APPROVED FOR RELEASE: 08/26/2000 CIA-RDP86-00513R001653920012-2"



[redacted], A.V.; KORSHAK, V.V.; KHORUN, A.P.

Polymerization and copolymerization of 3,3-dichloro-1-propene. Izv. AN SSSR. Ser. khim. no.7:1264-1266 '65. (MIRA 18:7)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

SUPRUN, A. S.

Suprun, A. S. and Khoroshev, I. I. - "Methods of reducing the consumption of coke and the content of carbon in the cupola melting of malleable cast iron", Trudy Rost. n/D in-ta s.-kh. mashinostroyeniya, Issue 4, 1948, p. 107-09.

SO: U-411, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 20, 1949).

SUPRUN, A.S.

Effect of sulfur on the mechanical properties of modified malleable cast iron. Lit. proizv. no.1:13-14 Ja '59. (MIRA 12:1)
(Cast iron--Testing) (Sulfur)

SUPRUN, A.V.

Role of Narzan baths in the compound treatment of primary glaucoma. Vest.oft. no.4:19-22 '62. (MIRA 15:11)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut glaznykh bolezney imeni Gel'mgol'tsa i glaznoye otdeleniye sanatoriya "Piket" kurorta Kislovodsk (nauchnyy rukovoditel' - prof. N.M. Pavlov).

(GLAUCOMA) (MINERAL WATERS)

SUPRUN, A.V.

Sanatorium and health-resort treatment of patients with primary glaucoma. Uch.zap. GNII glaz.bol. no.8: 228-238'63.
(MIRA 16:9)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut glaznych bolezney imeni Gel'mgol'tsa.
(GLAUCOMA) (SANATORIUMS)
(HEALTH RESORTS, WATERING-PLACES, ETC.)

SUPRUN, A.V.

Results of sanatorium and health-resort treatment of patients with primary glaucoma. Uch.zap. GNII glaz.bol. no.8:239-243 '63. (MIRA 16:9)

1. Gosudarstvenyy nauchno-issledovatel'skiy institut glaznykh bolezney imeni Gel'mgol'tsa.
(GLAUCOMA) (KISLOVODSK—SANATORIUMS)
(KISLOVODSK—HEALTH RESORTS, WATERING-PLACES, ETC.)

PHASE I BOOK EXPLOITATION SOV/4303

Frunze. Universitet. Nauchnoye studencheskoye obshchestvo

Sbornik nauchnykh rabot studentov, vyp. 2 (Collection of Scientific Works of Students, No. 2) Frunze, 1959. 99 p. 500 copies printed.

Sponsoring Agency: Kirgizskiy gosudarstvennyy universitet. Nauchnoye studencheskoye obshchestvo.

Resp. Ed.: L. A. Spektorov, Docent; Tech. Ed.: N. A. Yefimov.

PURPOSE: This book is intended for mathematicians, natural scientists, and philologists.

COVERAGE: The collection of articles contains studies in mathematics and mechanics, physics, biology, and philology written by members of the Nauchnoye studencheskoye obshchestvo (Students' Scientific Association) of Kirgizskiy gosudarstvennyy universitet (Kirgiz State University) under the guidance of faculty members. References accompany each article.

PHYSICS

PHILOLOGY

L [illegible] EWT(d)/FS[illegible]/EWP(c)/EWA(d)/EWP(v)/EEC-4/EEC(t)/T/EWP(k)/EWP(h)/

ACCESSION NR AM4043710 BOOK EXPLOITATION S/

[illegible] Aleksandr Petrovich, and Saprun, Boris Antonovich

[illegible] in binary code information transmission [illegible] dvoichnym[illegible]

[illegible] tables, errata slip inserted. [illegible] copies printed.

TOPIC TAGS: automation, correcting code, redundant coding, information transmission

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NO REF SOV: 015 OTHER: 016

Card 2/2

SUPRUN, Fedor Kondrat'yevich; YEVSEYEV, V.I., tekhn. red.

[Theory and design of mechanisms] Teoriia i proektirovanie mekhanizmov; konspekt lektsii. Leningrad, Leningr. elektrotekhn. in-t. Pt.1. 1962. 207 p. (MIRA 16:6)
(Mechanisms)

SUPRUN, F.K.

The LETI-62 diapositive projector. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. 17 no.1:50-52 '64. (MIRA 17:2)

LISTVIN, N.I., inzhener-podpolkovnik; SUPRUN, F.P., polkovnik.

At the Aeronautical Exhibition in Farnborough. Sat.Vozd.Fl. 39 no.11:89-96 '56. (MLRA 10:3)
(Farnborough, Great Britain--Aeronautics--Exhibitions)

SUPRUN, F.P.; SHILOKOV, K.V.; BLAGONRAVOV, A.A., akademik, red.; SMIRNOV, Ye.A., red.; BORISOV, V.V., red.; BERDNIKOVA, N.D., red.-leksikograf; KUZ'MIN, I.F., tekhn. red.

[English-Russian astronautics dictionary] Anglo-russkii slovar' po kosmonavtike. Moskva, Voenizdat, 1964. 304 p. (MIRA 17:2)

SUPRUN, G.

Understand thoroughly the essence of trade union work. Okhr. truda i sots.strakh. no.2:22-26 Fe '59. (MIRA 12:4)

1. Sekretar' Kaluzhskogo obkoma Kommunisticheskoy Partii Sovetskogo Soyuza.
(Kaluga--Industrial hygiene)

SUPRUN, G.F., kand. tekhn. nauk

Frequency changes in marine synchronous generators caused by load switching. Sudostroenie 25 no.4:32-35 Ap '59. (MIRA 12:6)
(Electric generators) (Electricity on ships)

TRESHCHEV, Ivan Il'ich; SUFRUN, G.F., doktor tekhn. nauk, retsenzent; SMIRNOV, V.A., kand. tekhn. nauk, nauchn. red.; ROZENGAUZ, N.M., red.

[Asymmetrical operating modes of a.c. machines of ships] Nesimmetrichnye rezhimy sudovykh mashin peremennogo toka. Leningrad, Sudostroenie, 1965. 247 p. (MIRA 18:5)

KONSTANTINOV, Vasiliy Nikolayevich: VILESOV, D.V., doktor tekhn. nauk prof., retsenzent; KUZNETSOV, N.A., Laureat Gos. premii, retsenzent; SUPRUN, G.F., doktor tekhn.nauk nauchn. red.; CHFAS, M.A., red.

[Synchronization of marine synchronous generators] Sinkhronizatsiia sudovykh sinkhronnykh generatorov. Leningrad, Sudostroenie, 1965. 289 p. (MIRA 19:1)

AUBRUN, G.S.

Efficient application of certain methods of erecting sheet metal structures. Avtom. svar. 18 no.6:67-69 Je '65. (MIRA 18:6)

1. Institut elektrosvarki imeni Patona AN Ukrssh.

SUPRUN, I.; APOSTOLI, B.

Why Leningrad ship model builders are so successful. Voen. znan. 36 no.7:31 Jl '60 (MIRA 13:7)

1. Instruktor gorodskogo komiteta Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu, Leningrad (for Suprun).
2. Predsedatel' gorodskoy sektsii morskogo modelizma, Leningrad (for Apostoli).

(Leningrad--Ship models)

Preventing losses in steel wire production Moskva, Gos nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1952. 27 p. (Peredovye metody truda) (54-22438)

TS270.S87

SUPRUN, I. I.

Verlustbekampfung Bei Der Stahldrah-Therstellung. Leipzig, Fachbuchverlag, 1954.
21 P. Illus., Diagrs., Tables.
Translation From The Russian, Bor'ba S Poteryami V Stalyprovolotnom Proizdvodstve, 1952.

SO: N/5
733.96
.S9

STARSHINOV, B.N., kand.tekhn.nauk, SAVELOV, N.I., inzh., TARASOV, D.A., inzh., SUPRUN, I.Yo., inzh., GORBANEV, Ya.S., inzh., PLISKANOVSKIY, S.T., inzh.

Adopting a blast furnace with a useful capacity of 1719 m^3.
Metallurg 5 no.7:7-9 Jl '60. (MIRA13:7)
(Blast furnaces)

STARSHINOV, B.N., kand.tekhn.nauk; LEBEDEV, A.Ye., kand.tekhn.nauk; LUKASHOV, G.G., inzh.; SAVELOV, N.I., inzh.; TARASOV, D.A., inzh.; SUPRUN, I.Ye., inzh.; TIKHOMIROV, Ye.N., inzh.; SINITSKIY, V.D., inzh.; GORBANEV, Ya.S., inzh.; PRIKHOD'KO, L.D., inzh.

Operation of a blast furnace with a capacity of 1513 m^3. Biul. TSIICHM no.9:1-6 '60. (MIRA 15:4)
(Blast furnaces)